# Request for Proposal (RFP)
# Consultancy Services for Economic Impact Analysis of Battery Supply Chain Ecosystem in Indonesia

**Institute for Essential Services Reform**
Tebet Timur Raya No. 48b
Jakarta Selatan
Indonesia
25 August 2025

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| **RFP No.** | **1113/IESR/VIII/PM-EST/ADM-RFP/2025** |
| **Issue date** | **August 25th 2025** |
| **Proposal due date and time** | **September 7th 2025** |
| **Anticipated Award Date** | **September 15th 2025** |
| **Contact Person/Department** | **Auzora Pratopo**<br>**auzora@iesr.or.id**<br>**Energy System Transformation Program** |

## 1. BACKGROUND AND PROJECT SUMMARY

Indonesia's National Electricity Plan (RUKN) 2024–2026 projects 443 GW of installed capacity by 2060, with 41.6% from Viable Renewable Energy (VRE). As VRE capacity increases, ensuring power sector reliability through expanding energy storage becomes critical. Additionally, electrification of transport would also accelerate which constitutes potential demand for battery technology. The Draft National Energy Policy (RPP KEN) already targets 178 million EVs by 2060, while RUKN sets a battery energy storage storage goal of 18 GW. Alternatively for a more ambitious energy transition scenario, IESR estimates a higher capacity of battery that up to 300 GW may be needed by 2045 and all road transport electrified by 2050 to meet the 1.5°C climate target.

With the huge potential demand for battery technology in the next few decades, establishing local capacity and supply chain for the technology would be critical to lower the cost and optimize economic benefit for Indonesia. The battery supply chain ecosystem can be categorized into three main segments: upstream, midstream, and downstream. However, the development of the battery supply chain ecosystem across these segments is significantly influenced by the declining cost of battery manufacturing, driven by continuous technological innovation and advancement and evolution of the battery chemistry.

BloombergNEF reports that the price of lithium-ion batteries has dropped to USD 139 per kilowatt-hour as of 2023. Despite this positive trend, several structural challenges remain. Notably, Indonesia currently lacks an operational battery recycling system, limiting the circularity and sustainability of its battery ecosystem. Moreover, there is a disconnect between Indonesia's substantial nickel reserves, accounting for approximately 48% of global production, and the configuration of its electric vehicle (EV) supply chain. While Indonesia holds strong potential to develop a nickel-rich NMC (Nickel Manganese Cobalt) battery industry, most Original Equipment Manufacturer (OEM) facilities serving the domestic EV market are based in China, favoring the assembly of LFP (Lithium Iron Phosphate) batteries. This misalignment presents a strategic challenge for optimizing Indonesia's domestic value creation in the battery sectors. The study intends to calculate the economic impact caused by development of the end-to-end battery supply chain in Indonesia based on the battery types trend projection (lithium ion, sodium ion, redox flow battery, etc) and also projected demand of global energy storage and EV battery demand from IESR study.

As an energy and environment think-tank, the Institute for Essential Services Reform (IESR) encourages transformation into a low carbon energy system, therefore, is conducting a study to assess the economic impact regarding the development of the battery supply chain ecosystem in Indonesia. In line with our commitment and the aforementioned opportunities and challenges, this study is expected to understand the impact of battery supply chain development in Indonesia, especially through social and economic perspectives, including potential job creation, income multiplier, and economic growth in battery hub

development in Indonesia, for both EV and energy storage systems. This study is expected to start on September 17th and finish on November 15th, 2025. Other information and details can be found in the following sections.

## 2. SCOPE OF WORK AND DELIVERABLES

### 2.1 Economic Impact Assessment

As part of the analysis, the study will incorporate a comprehensive economic impact assessment. This assessment will examine both national and sectoral-level economic impacts of battery industry development in Indonesia. The analysis should consider different battery industry technology development projections in a multi pre-defined scenario to meet the global demand. Upon the completion of the project, consultants are expected to conduct analysis on economic impact related point, including but not limited to the following:

a. **Task 1: Sectoral economic structure analysis**
   A targeted analysis that maps sectoral output shares and uses an input-output framework to show how battery industry demand propagates through the economy (national and battery-manufacturing provinces). The deliverable will reproduce a clear sectoral output table, identify battery-relevant sectors.
b. **Task 2: Direct, indirect and induced economic impact of developing battery industry in Indonesia**
   **Impact on economic growth**

- Estimate the actual GDP growth impact of the current level of committed and operational battery manufacturing investments in Indonesia, i.e. Dragon Consortium and Titan Consortium. In parallel, the analysis shall also quantify the scale of additional investment (cash injection) required from the battery manufacturing sector to achieve a certain target of economic growth (i.e. national economic growth of 8%).
- The analysis should show annual GDP/GRDP contribution and share of GDP/GRDP from other sectors. The quantified direct, indirect and induced economic impact presented under the actual masterplan of each existing consortium and alternative development scenarios (battery assembly only; partial cell production; full gigafactory with upstream processing) and also different battery technology (NMC, LFP, Solid State, Sodium Ion battery).
- **Output multiplier impact**
  Total additional gross output in the economy (direct, indirect and induced) resulting from one unit of final demand in the battery sector. Emphasize implications for supply-chain development.
- **Income multiplier impact**
  Quantification of direct, indirect and induced estimate of the income multiplier associated with battery value-chain demand shocks: the change in household income resulting from one unit of final demand (i.e. IDR 1 billion) in the sector. Deliverable includes the formula and estimated multiplier(s) by scenario.
- **Job multiplier impact**
  Quantification of direct, indirect and induced employment generated per unit of final demand in the battery sector. Include methodology for deriving the labor coefficient (workers per unit output) and the labor multiplier (labor coefficient × output multiplier), plus job composition by skill level. In addition to the multiplier, the analysis must provide an estimate of the absolute number of jobs created under each development scenario and map these jobs to specific sectors where they are expected to occur (e.g. battery manufacturing, mining, logistics, construction,

recycling, services).

- **Local benefit analysis (informal economy growth)**
  Assessments and indicators showing how battery industry expansion stimulates growth in associated informal sectors (small parts suppliers, logistics, repair services, waste pickers/recyclers, laundromats, housings, local food and services). The deliverable should identify which informal sub-activities are likely to expand, the scale of income effects, and risks/opportunities for formalization and decent work.

The final deliverable should include, among others, the estimated job creation, economic impact, and other relevant aspects as a result of developing the national battery industry and supply chain ecosystem.

**2.2 Suggested Methodology**

Any proposed methods are welcome. As a suggestion, a mixed modelling approach that combines national IO (input-output) or SAM (social accounting matrix — which links production, value added and household income flows) with IRIO/MRIO options (inter-regional IO for province-level impacts and multi-regional IO for cross-border supply-chain) is recommended.

**2.3 Reporting Requirements and Project Timeline**

The interim report should be submitted in PPT format, while the final deliverables must be provided in both PPT and Word formats, supported with visuals. These should be prepared within the restricted time window outlined below.

- **Research commencement**: The research must be commenced in the week of **17 September 2025**
- **Milestones and progresses**: with milestones/progresses as designated below. Agreed-upon periodical progress meetings will be scheduled to ensure the process goes smoothly.
- **Research finalization**: the results of the project must be finalized no later than **15 November 2025**.

A draft timeline is presented below. Internal changes may be made if mutually agreed upon;

| Deliverables and/or Milestones | Timeline (2025) | Payment Terms |
|---|---|---|
| *Deadline for the proposal submission* | *7 September* | - |
| *Proposals evaluation* | *8-10 September* | |
| *Clarification meeting between IESR and potential consultants* | *10-12 September* | - |
| *Winner announcement* | *15 September* | - |
| *Contract Finalization and Project Kick-off* | *17-22 September* | *Mutually agreed schedule* |
| *Stage 1: Inception, scoping, methodology and data requirements* | *17-28 September* | *20%* |
| *Stage 2: Data assembly, modelling and interim report for Task 1 and Task 2* | *29 September - 31 October* | *40%* |
| *Stage 3: Revision, final presentation and knowledge transfer* | *1-10 November* | |
| *Project wrap up* | *11-15 November* | *40%* |

A regular (weekly or biweekly) coordination and report meeting would be conducted between IESR and the selected consultant. Unless otherwise noted, work should be completed by the date identified above.
During the project execution process, the selected bidder must do the agreed methodology they proposed and IESR will act as reviewer and timeline keeper.

## 3. PAYMENT TERMS

After the completion of each project stage, the consultant must submit the corresponding deliverables to IESR in accordance with the agreed scope for that stage. The submission must be in the format(s) specified in the Scope of Work and Reporting Requirements. It should also include all supporting data, analysis, and documentation necessary for IESR to review and verify the deliverables.

Upon submission, IESR will review the deliverables to ensure they meet the quality standards and requirements set forth in the contract. Once the deliverables are accepted, IESR will prepare and provide official minutes of the handover, signed by both parties as confirmation of receipt and acceptance.

Following acceptance, the consultant must submit all required administrative documents, including but not limited to the official invoice for the agreed payment term and any additional forms or compliance documents as specified in the contract.

Upon receipt of complete and accurate administrative documentation, IESR will process the payment corresponding to that project stage within seven (7) calendar days, in accordance with the agreed payment schedule.

## 4. PROPOSAL AND SUBMISSION GUIDELINE

### 4.1 Proposal requirements

All bidders are expected to submit their:

a. Main proposal, and
b. Statement letters. Consists of 11 letters, all formats can be found in: https://bit.ly/IESRBidderStatementLetter
c. Digital copy of taxpayer identification number card
d. Bank statement (*rekening koran*)
e. Company profile and portfolio

The main proposal is expected in PDF format, written in English/Bahasa Indonesia with no certain formats (margin and font) specified as long as the whole information is clearly stated and delivered not exceeding 10 pages in length, excluding the annex.

### 4.2 Required content

The proposal should cover the following items:

a. Executive Summary, the value proposition of your expertise/institution/company can be included in this section or in a separate section.
b. Contextual overview of the RFP – The bidder's understanding to the RFP
c. Proposed methodology / solutions (including plan to obtain data and information)
d. Detailed project timeline and work plan
e. Project management and team organization, including brief description of each team member's role, tasks, and responsibilities.

f. Bidders should provide a description of experience in a similar domain of analysis related landscapes in Indonesia is advantageous, especially related to the battery technology industry and ecosystem for both national and global would be beneficial.

- *Team composition and qualifications*
  Bidders are required to provide a detailed description of their team composition, including the academic qualifications and/or professional experience of each member. The required qualifications and experience for each role can be met through either relevant academic background or professional experience, as specified in the table below:

| No | Role | Academic qualifications | Experiences |
|---|---|---|---|
| 1 | Team Leader | Holds a Master's degree or PhD in a relevant field such as environmental engineering, environmental economics, statistics, or other disciplines relevant to the project. | Preferably has 5 years of professional experience for a Master's graduate or 3 years of experience for PhD , including leading multi-disciplinary teams or similar projects. |
| 2 | Team member(s) | Holds at least a Bachelor's degree in a relevant field such as environmental engineering, environmental economics, statistics, or other disciplines relevant to the project. | Preferably has a minimum of 3 years of professional experience relevant to the respective project domain.<br>Demonstrated knowledge and practical experience in applied socio-economic impact. |

- *Outsourcing terms and condition*

  If the individual/organization submitting a proposal **must outsource or contract any work to meet the requirements**, this **must be clearly stated** in the proposal. Additionally, costs included in proposals must include any outsourced or contracted work. Any outsourcing or contracting organization must be named and described in the proposal. Please itemize all costs and include a description of associated services. Contract terms and conditions will be negotiated upon the selection of the winning bidder of this RFP.

- *Additional requirements*
  - ➢ Anticipated resources: Provide details on the total number of resources you will assign to this project including their role, titles, and experience.
  - ➢ Project timeline: Confirmation of timeframe for completion of the project, outlining how you will meet the deliverables within the allocated time, including detailed of task descriptions in each deliverable
  - ➢ Methodology and assumptions: A brief description of the methodology and assumptions used

g. Detailed pricing proposal

All proposals must include proposed costs (in Indonesian Rupiah/IDR) to complete the tasks described in the project scope. Costs should be stated as one-time or non-recurring costs (NRC). A more detailed proposal is encouraged to ease the selection process. The budget ceiling for this proposal is **IDR160.000.000 including necessary taxes,** for all costs required through the study.

Any additional costs (travel, FGD, etc) required to complete the work can be identified and estimated in the budget. This information would be treated as additional information for IESR to evaluate the robustness of methodologies. However, these additional costs would be covered in-hand by IESR and would be excluded from the final contract value.

*NOTE: All costs and fees must be clearly described in each proposal and should be separated into each item and scope of work.*

h. Assumptions (if the bidder has any suggestions in activities, methodology, etc. beyond specified in RFP)
i. Risk management plan (shall the consultant meet foreseen and unforeseen occurrences)
j. Annex, should include the following item:
    - Brief company/institution profile
    - The latest Curriculum Vitae (CV) of the team leader and all proposed team members with relevant experience.
    - Provide 3 or more previous projects that are similar in scope of nature, conducted by your organization.

All documents submitted must be signed by an official agent or representative of the company submitting the proposal. Upon receipt of the proposal, IESR will evaluate all the proposals and if clarification is required, a meeting may be held during the evaluation process before the winner is announced. **This RFP is intended for Indonesian companies/consultants or foreign companies/consultants that have a registered local representative and the necessary legal authorization to operate in Indonesia.**

Bidders must submit these documents via email to Program Manager Energy System Transformation at deon@iesr.or.id and cc to ninette@iesr.or.id, auzora@iesr.or.id, rifki@iesr.or.id, ilham@iesr.or.id and faris@iesr.or.id no later than **Sunday, 7 September 2025 23:59 PM** Indonesian Western Standard Time (WIB, GMT+7). Any bidders fail to meet this specific deadline, their participation will not be taken into the evaluation process. Please include "RFP Response – Consultancy Services for Economic Impact Analysis of Battery Supply Chain Ecosystem in Indonesia" in the subject line.

## 5. EVALUATION CRITERIA AND SELECTION PROCESS

With this RFP, IESR is soliciting proposals from consultants with extensive experience and portfolios in developing complex and thorough economic impact assessment. IESR will evaluate all the proposals submitted. After reviewing all proposals, IESR will select the consultant that brings suitable expertise, most closely aligns with project objectives, and articulates a clear, achievable research plan to meet those objectives within the required timeframe. The selected bidder shall complete the work in accordance with IESR standards and the terms outlined in the submitted proposal

All proposals received within the permitted deadline while fulfilling all requirements including statement

letters and other necessary administrative documents will be evaluated and assessed by IESR team evaluators. Each individual team member has the same capacity and authority while assessing the proposals (no single team member is more powerful nor significant than other team members). Thus to ensure the evaluation process runs smoothly and maintain integrity, their profiles and information will remain confidential and will not be disclosed.

**5.1 Evaluation Criteria**

On assessing the proposal document, certain categories are considered as the basis of the evaluation process. Sub-items define the maximum score of each category with 100 as the top score, whilst the category will account the total score based on established percentage, as follows:

| No | Item | Max score |
|---|---|---|
| **Project context (25%)** ***max score: 100*** | | |
| 1 | Overview RFP context – Project understanding | **60** |
| 2 | Company expertise (including experience and qualifications) | **40** |
| **Technical Proposal (40%)** ***max score: 100*** | | |
| 3 | Proposed methodology | **40** |
| 4 | Project deliverables | **30** |
| 5 | Project management and team organization<br>including brief description of each team member role and tasks/responsibilities taken. Compatibility between members' experience/qualification with their task allocation. | **30** |
| **Pricing proposal (15%)** ***max score: 100*** | | |
| 6 | Proposed budget (Technical and non-technical) | **60** |
| 7 | Team member working allocation (Man-days) | **40** |
| **Appendices: previous projects and studies (20%)** ***max score: 100*** | | |
| 8 | Organization experience on working with relevant project | **40** |
| 9 | Resume of team leader and each team member:<br>Member experience on working with relevant project | **40** |
| 10 | Experience on working with IESR (organization and team) | **10** |
| 11 | Experience on working with project which has similar budget | **10** |

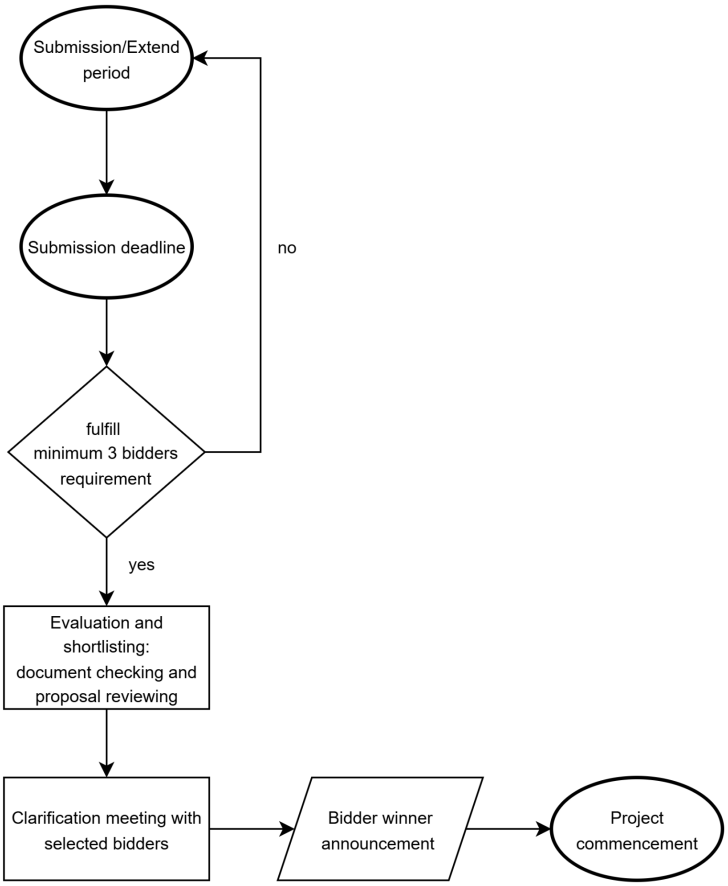
**5.2 Selection Process**

After the submission deadline, all bidders whose proposals have been reviewed and shortlisted as meeting the criteria and IESR's standards will receive confirmation via email to proceed to the clarification meeting. This meeting is scheduled to take place approximately 2-3 days after the RFP period closes.

Bidders who have submitted the required administrative documents and whose proposals align with the

study objectives will present and clarify their proposals to the IESR team bidding evaluation members. The session will cover, but is not limited to, methodologies, assumptions, data collection processes, and any other relevant activities related to the project. A mutually agreed schedule for the meeting will be confirmed in advance.

The winning bidder will be announced approximately 3-5 days after the clarification sessions conclude, via email and the IESR website. In short, the selection and evaluation process is as shown below:




The selected bidder is the most qualified and responsive proposer whose proposal is deemed to be in the best interest of IESR as the procuring entity, based on the stated criteria in this RFP document. All decisions and assessments made by IESR during the RFP selection and evaluation processes are final and cannot be interfered with by any external parties.

## 6. TERMS AND CONDITIONS

### 6.1 Confidentiality and Proprietary Information

All information and documents submitted during this RFP process will become the exclusive property of IESR. All proprietary and confidential information will not be shared to unauthorized parties, handled with care by IESR, and used exclusively for this RFP evaluation process.

### 6.2 Bidder selection, contract negotiation, and terms of agreement

Upon the winning bidder notification, the contract negotiation between IESR and the selected Consultant will begin immediately and must proceed quickly to meet the project timeline. IESR will immediately prepare the contract document in communication with the selected consultant, shall any necessary information be provided. The contract then must be signed by both parties prior to the kickoff meeting. It will regulate all rights and obligations of both parties, with reference to the RFP document, consultant proposals, and other agreements that have been mutually agreed upon. It will cover the scope of work & deliverables, agreed timeline, payment terms and requirements, contract value, and other confidential information. All terms and conditions within the contract document must be kept confidential by the Consultant, unless the disclosure is required pursuant to process of law. Disclosing or using this information for any purpose beyond the scope of this Agreement, or beyond the exceptions set forth above, is expressly forbidden without the prior consent of the 1st Party.

### 6.3 Disclaimers

IESR as the procuring entity reserves the right to reject any or all proposals if any requirements were found inadequate and/or even if fraud was potentially indicated. This might lead to the inadmissible participation of the bidders, promptly disqualified from the evaluation process, and might even potentially get ruled out from participating in future procurement processes for an indeterminate period, subject to the discretion of the contracting authority. IESR has also all the rights to waive informalities, and/or free to negotiate with the selected bidders.

While IESR has no obligation to award a contract if no bidders comply with the specific standards and requirements and/or less than minimum required bidders. Neither IESR has an obligation to be involved in any proposal preparation process by the bidders (e.g involvement in proposal pricing costs, technical proposal, or any other relevant processes). In the event of such occurrence, IESR reserves the right to initiate a re-bidding process or suspend the procurement process indefinitely, at its sole discretion.

### 6.4 Governing law

This service procurement process shall be governed by and constructed in accordance with the laws of the Republic of Indonesia from the beginning of the RFP publication until the handover of the final report. Any dispute of difference whatsoever arising out of or in connection during this service procurement process shall be submitted to Pengadilan Tinggi Negeri Jakarta Selatan, Indonesia, in accordance with and subject to the law of Republic of Indonesia.

## 7. INQUIRIES AND COMMUNICATIONS

Shall the bidder find any ambiguity or need any clarification to this RFP document, please find our contact person via email to:

**Auzora Pratopo**
auzora@iesr.or.id
**Energy System Transformation Program Officer**

Any changes, amendments, and clarifications to the RFP will be issued as formal addenda and distributed to all bidders.

## 8. Acknowledgement

| Reviewed by: | Approved by: |
| --- | --- |
|  <br>**Deon Arinaldo**<br>Program Manager<br>Energy System Transformation IESR |  <br>**Kharina Dhewayani**<br>Operational Manager<br>IESR |